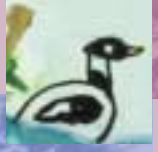


Glossary

Acid Mine Drainage
Acidic water that flows from areas that have been mined for coal or mineral ores. The acidity is caused by the exposure of sulfur-bearing minerals to oxidizing conditions. Acid mine drainage is toxic to aquatic organisms.

Air (or Atmospheric) Deposition
Process by which pollutants are released into the air, carried by wind patterns away from their place of origin, and deposited on the land or in waterbodies. These pollutants come from man-made and natural sources. Any chemical that is emitted into the air can become an air deposition problem.

Algae
Simple rootless plants that grow in sunlit waters in proportion to the amount of available nutrients. They are food for fish and small aquatic animals. Excessive amounts of algae can adversely affect water quality by lowering the dissolved oxygen in the water.

Algal Blooms
Sudden spurts of algae growth, which can adversely affect water quality and indicate potentially hazardous changes in local water chemistry.

Anadromous
Ascending rivers from the sea, at certain seasons, for breeding. For example, salmon and shad are anadromous fish.

Aquifer
An underground geological formation or group of formations containing water. Aquifers are sources of groundwater for wells and springs.

Bacteria
Microscopic living organisms that can aid in pollution control by metabolizing organic matter in sewage, oil spills, or other pollutants. However, certain bacteria in soil, water, or air can also cause human, animal, and plant health problems.

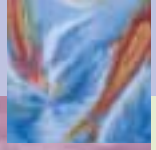
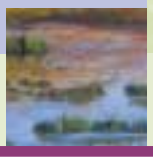
Basin
The area of land that drains water, sediment, and dissolved materials to a common outlet such as a stream, lake, or estuary. Often used as a synonym for watershed or catchment.

Best Management Practice
Methods, measures, or practices that prevent or reduce water pollution. Best management practices may include treatment requirements, operating procedures, schedules of activities, prohibition of practices, maintenance procedures, or other management practices which control runoff, spillage, leaks, sludge or waste disposal, or drainage from various sites and operations.

Biodiversity
The variety of organisms found within a specified geographic region.

Catchment
A structure, such as a basin or reservoir, that collects or drains water. Often used as a synonym for watershed or basin.

Channelization
Human engineering of river channels to enlarge, straighten, embank, or protect existing channels, create new channels, or protect adjacent structures.

Clean Water Act
National environmental legislation designed to protect and restore the nation's water resources passed by Congress in 1972 in response to growing public concern for serious and widespread water pollution. The Clean Water Act is the primary federal law that protects our nation's waters, including lakes, rivers, aquifers, and coastal areas.

Concentrated Animal Feeding Operation
Agricultural enterprise that keeps and raises animals in confined situations. Concentrated animal feeding operations congregate animals, feed, manure and urine, dead animals, and production operations on a small land area. These operations bring food to the animals rather than allowing the animals to graze or otherwise seek food in pastures, fields, or on rangeland. There are approximately 361,000 animal feeding operations in the United States, of which 5-10 percent are considered concentrated animal feeding operations.

Conservation Easement
Legal agreement that restricts landowners to uses that are compatible with conservation and environmental values. Easements are generally governed by state laws; thus states administer easements in various ways.

Ecosystem
A system defined by the interaction of a community of organisms with their physical environment. Ecosystems can be considered at many different scales.

Erosion
The wearing away of land surface by wind or water, intensified by land-clearing practices related to farming, residential or industrial development, road building, or logging.

Estuary
A wide lower course of a river near the sea where fresh and salt water mix.

Eutrophic
Having waters rich in mineral and organic nutrients that promote a proliferation of plant life, especially algae, that reduces the dissolved oxygen content and often causes the death of other organisms.

Evapotranspiration
The combined processes of evaporation and transpiration. It is the sum of water used by vegetation and water lost by evaporation.

Groundwater
Water beneath the earth's surface that supplies wells and springs.

Habitat
The living and non-living environment where a population (e.g., human, animal, plant, microorganism) lives. Habitat includes all things an organism needs to survive–food, water, space, and protection from predators.

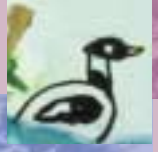
Hydrology
The study of the occurrence, distribution, and circulation of the natural waters of the earth.

Impervious Surfaces or Impervious Cover
Hard surfaces within a watershed including rooftops, parking lots, streets, sidewalks, and driveways that do not allow rainfall to infiltrate underlying soils.

Infiltration
The flow of a fluid into a substance through pores or small openings.

Insecticide
A chemical compound specifically used to kill or prevent the growth of insects.

Invasive Species
With respect to a particular ecosystem, any animal or plant that is not native to that ecosystem whose introduction does or is likely to cause economic or environmental harm, or harm to human health.



Irrigation
The controlled application of water to arable lands to supply water requirements not satisfied by rainfall.

Mitigation (of wetlands)
Restoration, creation, enhancement, or preservation of wetlands that expressly compensates for unavoidable wetland losses due to development actions.

Native Species
An animal or plant that originated in a particular place or region.

National Pollutant Discharge Elimination System
The Environmental Protection Agency's permitting system to control and monitor all point sources of pollution. Primary regulated entities are industrial facilities and publicly owned water treatment facilities.

Nonpoint Source Pollution
Pollution, unlike pollution from industrial and sewage treatment plants, that comes from many diffuse sources. Nonpoint source pollution is usually caused by rainfall or snowmelt moving over and through the ground. As the runoff moves, it picks up and carries away natural and human-made pollutants, finally depositing them into lakes, rivers, wetlands, coastal waters, and even our underground sources of drinking water. Atmospheric deposition, hydromodification, and failing septic systems are other sources of nonpoint source pollution.

Nutrient
A substance necessary for the growth of living organisms. Nitrogen and phosphorous, for example, are required nutrients for algae growth.

Overland Flow
The flow of rainwater or snowmelt over the land surface toward a waterbody. After an overland flow enters a stream, it is called runoff.

Precipitation
The discharge of water, in liquid or solid state, out of the atmosphere, generally upon a land or water surface. Precipitation includes rainfall, snow, hail, and sleet.

Pathogens
Microorganisms that can cause disease in humans, animals, plants, or other organisms. Pathogens include bacteria, viruses, and parasites and can be found in sewage, runoff from animal farms, and wild animals. Fish and shellfish contaminated by pathogens, or the pathogens themselves, can cause serious illnesses.

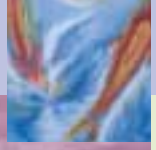
Point Source Pollution
Pollution discharged by any discernible, confined, and discrete conveyance, including any pipe, ditch, channel, tunnel, conduit, well, discrete fixture, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel, or other floating craft.

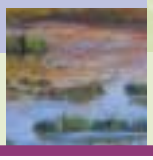
Reservoir
A pond, lake, or basin, either natural or artificial, for the storage, regulation, and control of water.

Riparian Zone / Riparian Buffer
The land adjacent to streams, rivers, and lakes that actively interfaces with the waterbody through physical and chemical processes. Healthy riparian zones filter nutrients and sediments, increase streambank stability, and provide shade that reduces stream temperatures.

Runoff
Precipitation, snow melt, or irrigation water that runs off the land into surface water. Runoff can carry pollutants from the air and land into the receiving waters.

Sediment
Fragmental material that originates from weathering of rocks and is transported by, suspended in, or deposited by water or air.





Stakeholder
One who has a share or an interest in an issue.

Virus
The smallest form of microorganisms capable of causing disease. Viruses of fecal origin are infectious to humans by waterborne transmission.

Water Quality Standard
A law or regulation that consists of the beneficial use or uses of a waterbody, the numeric and narrative water quality criteria that are necessary to protect the use or uses of that particular waterbody, and an anti-degradation statement.

Watershed
The land area that drains into a single body of water such as a stream, river, lake, or wetland. Large watersheds may be composed of several smaller nested watersheds. Also known as a catchment or basin.

Watershed Approach
A coordinating framework for environmental management involving diverse stakeholders and utilizing sound science to focus resources on high priority issues within hydrologically defined areas.

Watershed Management
The process of using and supporting the watershed approach to manage land and water resources. The term often describes the implementation of watershed approaches by governmental agencies.

Watershed Practitioner
One who practices an occupation or technique related to the management of watersheds. Practitioners can include local citizens, government employees, landowners, business leaders, and representatives of non-profit organizations.

Watershed Restoration
The manipulation of physical, chemical, or biological characteristics of watersheds with the goal of returning natural or historic functions. Also, the return of a watershed to a close approximation of its condition prior to disturbance.

Wetlands
An area that is inundated or saturated by surface water or groundwater with a frequency and duration sufficient to support, and under normal circumstances supporting, vegetation adapted for life under those soil conditions. Swamps, bogs, fens, and marshes are examples of wetlands.